

## ABSTRACT OF THE DISCLOSURE

A photonic band gap coplanar waveguide transmission line and a method for fabricating a power divider using the same capable of increasing a characteristic impedance, increasing a signal line width of the transmission line and providing high power, includes: a ground conductive layer formed on a substrate; linear grooves formed on the ground conductive layer; a signal line formed between linear grooves; rectangular grooves formed close to the signal line, and formed on the ground conductive layer; and slots formed at the rectangular grooves respectively, and connecting the rectangular groove and the linear groove.